AD-A082 976 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
197058 MLRS, MISSILE NUMBERS 331, 196, ROUND NUMBERS R-72, R-73--ETC(U)
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LEVEL II

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DR 1114
JANUARY 1980
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ADA082976

METEOROLOGICAL DATA REPORT

19705B MLRS
Missile Nos. 331, 196
Round Nos. B-72, B-73
11 January 1980

by

White Sands Meteorological Team

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM
UNITED STATES ARMY ELECTRONICS COMMAND

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REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM
1 REPORT NUMBER: DR 1114 (14)	2 GOVT ACCESSION NO: ERADCOM/A-DR-1114
4 TITLE (and Subtitle): 19705B MLRS Missile Number 331, 196, Round Numbers B-72, B-73	5 TYPE OF REPORT & PERIOD COVERED
	6 PERFORMING ORG. REPORT NUMBER
7 AUTHOR(s): White Sands Meteorological Team	8 CONTRACT OR GRANT NUMBER(s): DA Task 1F665702D127-02
9 PERFORMING ORGANIZATION NAME AND ADDRESS	10 PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS: 12 13
11 CONTROLLING OFFICE NAME AND ADDRESS: US Army Electronics Research & Development Cmd (11) Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002	12 REPORT DATE: Jan 1980
	13 NUMBER OF PAGES: 18
14 MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office): US Army Electronics Research & Development Cmd Adelphi, MD 20783	15 SECURITY CLASS. (of this report): UNCLASSIFIED
	15a DECLASSIFICATION/DOWNGRADING SCHEDULE

16 DISTRIBUTION STATEMENT (of this Report)

17 DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

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18 SUPPLEMENTARY NOTES

19 KEY WORDS (Continue on reverse side if necessary and identify by block number)

20 ABSTRACT (Continue on reverse side if necessary and identify by block number)

Meteorological data gathered for the launching of 19705B MLRS, Missile Numbers 331, 196, Round Numbers B-72, B-73 are presented in tabular form.

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

CONTENTS

INTRODUCTION

19705B MLRS, Missile Numbers 331 and 196, Round Numbers B-72 and B-73, were launched from Snake Site, White Sands Missile Range (WSMR), New Mexico, at 1129:36 and 1129;40 MST, on 11 January 1980. The schedule launch times were 1100 and 1100:04 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature (^{o}C), relative humidity, dew point (^{o}C), density (gm/m^3), Wind direction and speed, and cloud cover were made at the SNAKE Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

SITE AND ALTITUDE
SNAKE 2Km
DENVER 950m

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 91,000 feet in 500-feet increments.

SITE AND TIME
JALLEN 1130 MST

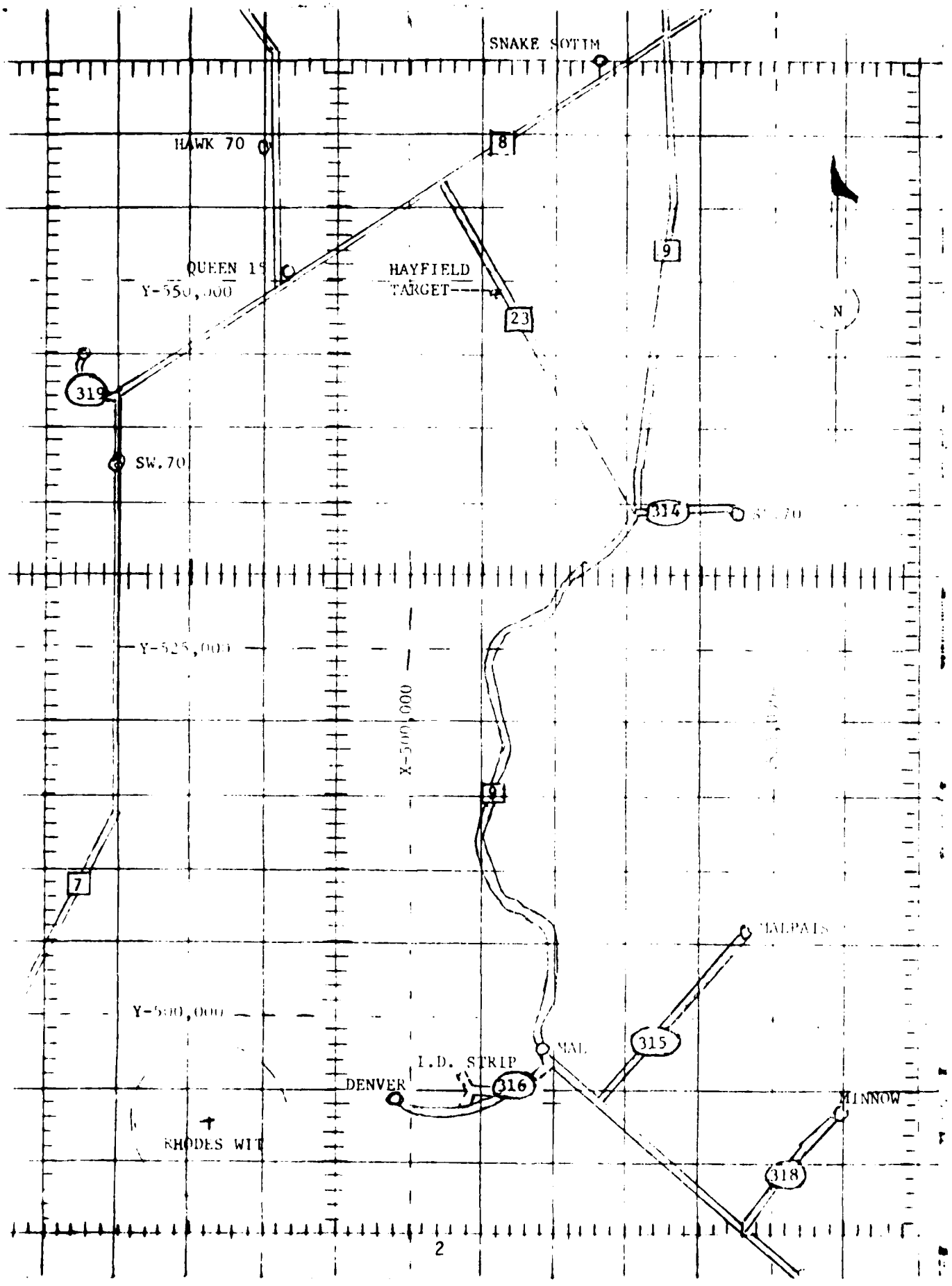
SNAKE SOUTH
HAWK 70
8
QUEEN 19
Y-550,000
HAYFIELD
TARGET
23
9
N
319
SW.70
314
Y-525,000
X-500,000
9
7
MALPAIS
Y-500,000
I.D. STRIP
DENVER
316
315
MINNOW
318
RHODES WIT

TABLE 1. Surface Observations taken at 1130 MST, 11 January 1980, at Snake Site, 19705B MLRS, Missile Numbers 331, 196, Round Numbers B-72, B-73.

ELEVATION	4471.	FT/MSL
PRESSURE	867.8	MBS
TEMPERATURE	9.2	^{o}C
RELATIVE HUMIDITY	76	%
DEW POINT	5.1	^{o}C
DENSITY		GM/M^3
WIND SPEED	04	KTS
WIND DIRECTION	180	DEGREES
CLOUD COVER	10	Ns

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM SNAKE SITE DATE 11 January 1980 TIME 1050 MST

TRACKER COORDINATES (WSTM) X= UNKNOWN Y= UNKNOWN H UNKNOWN

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL XXXX OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	180	03
90	200	04
150	149	06
210	160	08
270	167	11
330	168	14
390	158	15
500	140	18
650	133	20
800	141	21
950	154	13
1150	192	11
1350	235	14
1550	238	14
1750	251	14
2000	267	13

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM SNAKE SITE DATE 11 January 1980 TIME 1130 MST

TRACKER COORDINATES (WSTM) X= UNKNOWN Y= UNKNOWN UNKNOWN

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL XXX OR FEET AGL ____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	190	02
90	186	04
150	207	08
210	187	09
270	187	13
330	185	13
390	178	15
500	175	16
650	167	09
800	MISG	MISG
950	MISG	MISG
1150	MISG	MISG
1350	MISG	MISG
1550	213	09
1750	214	08
2000	243	05

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM DENVER SITE DATE 11 January 1980 TIME 1140 MST

TRACKER COORDINATES (WSTM) x 499,064.03 y 493,904.12 z 4123.12

NOTE: WIND DIRECTIONS ARE REFERENCED TO TRUE NORTH.

HEIGHTS ARE METERS AGL XXX OR FEET AGL ___.

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	180	06
90	188	09
150	216	14
210	196	14
270	189	18
330	190	19
390	194	23
500	194	20
650	204	17
800	188	17
950	194	18

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 80 1130 HRS MST
ASCENSION NO. 8

SIGNIFICANT LEVEL DATA
011003000B
JALLEN

TABLE 5

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT
880.8	4051.0	8.7	3.1	68.0
870.8	4360.6	7.1	1.8	69.0
850.0	5013.8	6.6	2.5	75.0
808.8	6349.9	4.4	1.9	84.0
770.0	7659.2	1.2	.3	94.0
700.0	10163.6	-2.9	-3.0	99.0
632.4	12793.5	-6.6	-6.7	99.0
598.2	14221.9	-7.1	-7.2	99.0
564.2	15717.7	-9.3	-9.4	99.0
500.0	18761.5	-14.6	-15.5	93.0
439.4	21949.1	-20.0	-23.3	75.0
410.4	23602.9	-23.9	-24.9	91.0
400.0	24218.3	-25.1	-27.8	78.0
383.0	25252.4	-27.3	-31.4	68.0
369.4	26105.2	-29.7	-32.7	75.0
337.0	28240.1	-34.2	-39.4	59.0
300.0	30880.7	-41.2	-45.0	66.0
282.4	32221.8	-45.1	-49.9	58.0
250.0	34858.8	-52.5		
200.0	39489.9	-63.6		
181.6	41437.1	-64.6		
172.8	42440.9	-63.0		
165.4	43338.1	-58.6		
156.4	44504.6	-55.8		
150.0	45379.4	-56.8		
140.8	46705.2	-55.7		
115.6	50764.3	-64.4		
106.0	52508.7	-65.4		
100.0	53672.0	-67.7		
96.6	54357.8	-68.3		
87.6	56311.6	-64.6		
70.0	60823.0	-65.6		
61.0	63606.2	-62.5		
55.8	65408.5	-65.6		
50.0	67606.6	-66.7		
46.2	69201.9	-62.5		
43.8	70285.1	-64.2		
41.4	71435.8	-60.2		
32.2	76583.5	-63.0		
30.0	78029.1	-61.5		

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 60 1130 HRS MST
ASCENSION NO. 8

SIGNIFICANT LEVEL DATA
0110030008
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 5(CONT)

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
25.2	81627.8	-58.7		
20.6	85781.6	-62.3		
20.0	86389.7	-59.5		
15.8	91327.8	-54.7		

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 60 1130 HRS MST
ASCENSION NO. 8

UPPER AIR DATA
0110030008
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 6

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.0	880.8	8.7	3.1	68.0	1085.1	655.1	.0	.0	1.000278
4500.0	866.3	7.0	2.0	70.3	1074.0	653.1	202.6	2.7	1.000273
5000.0	850.4	6.6	2.5	74.9	1055.5	652.7	202.6	5.7	1.000271
5500.0	834.8	5.8	2.3	78.3	1039.1	651.7	202.6	8.7	1.000267
6000.0	819.4	5.0	2.1	81.6	1023.0	650.8	203.0	10.6	1.000263
6500.0	804.3	4.0	1.8	85.1	1007.5	649.7	204.3	10.3	1.000259
7000.0	789.3	2.8	1.2	89.0	993.2	648.2	203.4	10.6	1.000254
7500.0	774.6	1.6	.6	92.8	979.2	646.7	201.4	11.3	1.000250
8000.0	760.1	.6	-.1	94.7	964.2	645.6	201.9	11.1	1.000245
8500.0	745.8	-.2	-.8	95.7	948.9	644.6	203.8	10.2	1.000241
9000.0	731.7	-1.0	-1.5	96.7	933.9	643.6	211.5	7.6	1.000236
9500.0	717.9	-1.8	-2.1	97.7	919.2	642.6	238.2	5.7	1.000232
10000.0	704.4	-2.6	-2.8	98.7	904.7	641.6	272.5	6.2	1.000227
10500.0	691.0	-3.4	-3.5	99.0	889.9	640.7	284.7	8.3	1.000223
11000.0	677.8	-4.1	-4.2	99.0	875.3	639.8	283.0	9.7	1.000218
11500.0	664.8	-4.8	-4.9	99.0	860.9	639.0	276.6	10.7	1.000214
12000.0	652.1	-5.5	-5.6	99.0	846.7	638.1	269.8	12.3	1.000210
12500.0	639.6	-6.2	-6.3	99.0	832.8	637.2	265.2	14.4	1.000206
13000.0	627.3	-6.7	-6.8	99.0	818.3	636.7	263.3	17.6	1.000202
13500.0	615.2	-6.8	-7.0	99.0	803.0	636.5	261.3	21.7	1.000198
14000.0	603.4	-7.0	-7.2	99.0	788.1	636.2	259.4	26.6	1.000195
14500.0	591.7	-7.5	-7.6	99.0	774.3	635.7	258.9	29.4	1.000191
15000.0	580.3	-8.2	-8.4	99.0	761.5	634.7	258.8	30.9	1.000187
15500.0	569.0	-9.0	-9.1	99.0	748.9	633.8	259.3	30.4	1.000183
16000.0	557.9	-9.8	-10.0	98.4	736.6	632.8	259.2	31.1	1.000180
16500.0	547.0	-10.7	-11.0	97.5	724.6	631.8	259.2	32.4	1.000176
17000.0	536.2	-11.5	-12.0	96.5	712.8	630.7	261.0	35.8	1.000172
17500.0	525.7	-12.4	-13.0	95.5	701.2	629.6	262.5	38.5	1.000169
18000.0	515.3	-13.3	-14.0	94.5	689.8	628.5	263.6	40.3	1.000165
18500.0	505.2	-14.1	-15.0	93.5	678.5	627.4	265.5	41.0	1.000162
19000.0	495.2	-15.0	-16.1	91.7	667.4	626.3	267.3	41.2	1.000159
19500.0	485.3	-15.9	-17.3	88.8	656.2	625.3	269.2	40.9	1.000155
20000.0	475.5	-16.7	-18.5	86.0	645.2	624.2	270.8	40.2	1.000152
20500.0	466.0	-17.5	-19.7	83.2	634.4	623.2	270.6	38.1	1.000149
21000.0	456.6	-18.4	-20.9	80.4	623.8	622.1	269.0	36.2	1.000146
21500.0	447.5	-19.2	-22.2	77.5	613.4	621.0	268.6	34.7	1.000143
22000.0	438.5	-20.1	-23.3	75.5	603.2	619.9	268.6	36.0	1.000140
22500.0	429.5	-21.3	-23.8	80.3	593.7	618.5	267.3	38.6	1.000138
23000.0	420.7	-22.5	-24.3	85.2	584.3	617.0	266.6	41.4	1.000135
23500.0	412.1	-23.7	-24.8	90.0	575.1	615.6	266.1	44.2	1.000133

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 80 1130 HRS MST
ASCENSION NO. 8

UPPER AIR DATA
0110030008
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 6 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
24000.0	403.7	-24.7	-26.8	82.6	565.6	614.3	256.0	45.5	1.000130
24500.0	395.3	-25.7	-28.8	75.3	556.2	613.0	256.0	46.8	1.000127
25000.0	387.1	-26.8	-30.5	70.4	547.0	611.7	255.5	48.1	1.000125
25500.0	379.0	-28.0	-31.7	70.0	538.3	610.1	254.7	49.3	1.000123
26000.0	371.1	-29.4	-32.5	74.1	530.1	608.3	252.4	50.8	1.000121
26500.0	363.2	-30.5	-33.9	72.0	521.3	606.9	250.5	52.5	1.000118
27000.0	355.5	-31.6	-35.5	68.3	512.5	605.6	249.2	54.5	1.000116
27500.0	347.9	-32.6	-37.0	64.5	503.8	604.3	248.1	56.9	1.000114
28000.0	340.5	-33.7	-38.6	60.8	495.2	602.9	247.3	59.7	1.000112
28500.0	333.2	-34.9	-39.9	59.7	487.0	601.4	246.2	62.1	1.000110
29000.0	325.9	-36.2	-41.0	61.0	479.1	599.7	244.8	63.6	1.000108
29500.0	318.8	-37.5	-42.0	62.3	471.3	598.0	243.7	64.6	1.000106
30000.0	311.9	-38.9	-43.1	63.7	463.6	596.4	243.3	64.8	1.000104
30500.0	305.1	-40.2	-44.2	65.0	456.1	594.7	243.1	65.1	1.000102
31000.0	298.4	-41.5	-45.5	65.3	448.8	592.9	243.5	65.8	1.000101
31500.0	291.7	-43.0	-47.3	62.3	441.5	591.0	243.9	66.3	1.000099
32000.0	285.2	-44.5	-49.1	59.3	434.5	589.2	243.6	65.6	1.000097
32500.0	278.8	-45.9	-51.6	51.9**	427.3	587.3	243.2	64.9	1.000096
33000.0	272.4	-47.3	-54.9	40.9**	420.2	585.5	243.4	65.7	1.000094
33500.0	266.2	-48.7	-58.6	29.9**	413.1	583.7	243.6	67.0	1.000092
34000.0	260.1	-50.1	-63.3	18.9**	406.2	581.8	243.8	69.1	1.000091
34500.0	254.2	-51.5	-70.7	7.9**	399.5	580.0	243.8	72.5	1.000089
35000.0	248.3	-52.8			392.6	578.2	243.8	75.8	1.000087
35500.0	242.4	-54.0			385.4	576.7	242.5	78.6	1.000086
36000.0	236.6	-55.2			378.3	575.1	241.3	81.3	1.000084
36500.0	231.0	-56.4			371.3	573.5	240.4	84.5	1.000083
37000.0	225.5	-57.6			364.5	571.9	239.7	87.9	1.000081
37500.0	220.1	-58.8			357.8	570.3	239.5	90.8	1.000080
38000.0	214.9	-60.0			351.2	568.7	239.9	91.9	1.000078
38500.0	209.8	-61.2			344.8	567.1	240.4	92.9	1.000077
39000.0	204.8	-62.4			338.5	565.5	242.1	90.4	1.000075
39500.0	199.9	-63.6			332.3	563.9	244.2	87.0	1.000074
40000.0	195.0	-63.9			324.6	563.6	246.7	84.3	1.000072
40500.0	190.2	-64.1			317.0	563.3	250.0	83.2	1.000071
41000.0	185.6	-64.4			309.7	562.9	253.4	82.5	1.000069
41500.0	181.0	-64.5			302.3	562.7	256.1	86.1	1.000067
42000.0	176.6	-63.7			293.7	563.8	258.5	90.3	1.000065
42500.0	172.3	-62.7			285.2	565.1	260.7	91.5	1.000064
43000.0	168.2	-60.3			275.2	566.4	263.1	90.2	1.000061
43500.0	164.1	-58.2			266.0	571.2	265.3	88.0	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 80 1130 HRS MST
ASCENSION NO. 8

UPPER AIR DATA
0110030008
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 6 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
44h00.0	160.2	-57.0	-[illegible]	82.6	258.3	572.7	268.8	81.5	1.000058
445[illegible].0	158.4	-58.6	-[illegible]	75.3	256.7	574.5	288.5	75.2	1.000056
450[illegible].0	156.7	-58.4	-[illegible]	70.9	255.9	573.6	287.6	72.4	1.000055
455[illegible].0	149.1	-58.7	-[illegible]	70.0	240.0	574.2	264.9	87.9	1.000053
460[illegible].0	145.6	-58.3	-[illegible]	71.1	233.9	575.7	262.4	88.2	1.000052
465[illegible].0	142.2	-59.9	-[illegible]	72.0	228.0	574.3	259.9	85.8	1.000051
470[illegible].0	138.8	-60.5	-[illegible]	68.5	223.0	573.8	258.5	88.0	1.000050
475[illegible].0	135.5	-57.4	-[illegible]	69.5	218.7	572.2	258.5	87.1	1.000049
480[illegible].0	132.2	-58.5	-[illegible]	68.8	214.6	570.8	259.0	88.5	1.000048
485[illegible].0	129.0	-59.9	-[illegible]	69.7	210.9	569.4	261.2	90.9	1.000047
490[illegible].0	125.9	-60.6	-[illegible]	61.0	208.4	567.9	263.2	73.6	1.000046
495[illegible].0	122.9	-61.7	-[illegible]	62.3	202.5	566.9	269.1	74.9	1.000045
500[illegible].0	120.0	-62.8	-[illegible]	63.7	198.7	565.1	268.8	76.8	1.000044
505[illegible].0	117.1	-63.8	-[illegible]	65.0	194.9	563.6	268.4	77.8	1.000043
510[illegible].0	114.3	-64.9	-[illegible]	65.3	190.8	562.7	269.8	76.1	1.000042
515[illegible].0	111.4	-64.8	-[illegible]	62.3	188.4	562.3	270.7	74.9	1.000041
520[illegible].0	108.7	-65.1	-[illegible]	59.5	182.0	561.9	272.1	73.8	1.000041
525[illegible].0	106.0	-65.4	-[illegible]	51.0**	177.8	561.9	274.5	72.8	1.000040
530[illegible].0	103.4	-66.4	-[illegible]	60.0**	174.2	560.2	276.8	72.0	1.000039
535[illegible].0	100.9	-67.4	-[illegible]	20.0**	170.1	558.9	280.0	71.5	1.000038
540[illegible].0	98.4	-68.0	-[illegible]	13.0**	167.0	558.0	283.5	70.9	1.000037
545[illegible].0	95.9	-68.0	-70.7	7.0**	162.9	558.0	286.8	68.5	1.000036
550[illegible].0	93.9	-67.1			158.1	559.2	290.2	65.0	1.000035
555[illegible].0	91.2	-68.1			153.9	560.5	293.3	61.6	1.000034
560[illegible].0	89.0	-65.2			149.0	561.8	294.8	57.0	1.000033
565[illegible].0	86.8	-64.8			145.0	562.9	298.2	52.5	1.000032
570[illegible].0	84.7	-64.8			141.5	562.4	295.5	49.8	1.000032
575[illegible].0	82.6	-64.9			138.1	562.2	295.9	47.7	1.000031
580[illegible].0	80.5	-65.0			134.8	562.1	292.4	45.9	1.000030
585[illegible].0	78.8	-65.1			131.5	561.9	291.9	45.4	1.000029
590[illegible].0	76.8	-65.2			128.4	561.8	291.4	44.9	1.000029
595[illegible].0	74.8	-65.3			125.3	561.6	290.6	43.7	1.000028
600[illegible].0	72.9	-69.4			122.3	561.5	289.2	41.7	1.000027
605[illegible].0	71.1	-65.5			119.4	561.3	287.8	39.7	1.000027
610[illegible].0	69.4	-65.4			116.4	561.5	284.5	37.2	1.000026
615[illegible].0	67.7	-64.8			113.2	562.5	280.1	34.6	1.000025
620[illegible].0	66.0	-64.5			110.2	563.0	275.8	32.5	1.000025
625[illegible].0	64.4	-63.7			107.2	563.8	275.6	31.8	1.000024
630[illegible].0	62.9	-63.2			104.3	564.5	275.7	31.2	1.000023
635[illegible].0	61.3	-62.6			101.5	565.3	277.4	31.5	1.000023

** [illegible] ASSUMED RELATIVE HUMIDITY [illegible] FOR COMPUTATION.

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 80 1130 HRS MST
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UPPER AIR DATA
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JALLEN

TABLE 6 (CONT)

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
64000.0	59.8	-63.2			99.3	564.5	280.4	32.6	1.000022
64500.0	58.4	-64.0			97.2	563.4	283.1	33.8	1.000022
65000.0	56.9	-64.9			95.2	562.2	285.9	34.9	1.000021
65500.0	55.5	-65.6			93.3	561.2	284.6	36.0	1.000021
66000.0	54.2	-65.9			91.1	560.9	284.6	37.1	1.000020
66500.0	52.8	-66.1			89.9	560.5	283.6	38.2	1.000020
67000.0	51.5	-66.4			86.8	560.2	282.7	39.3	1.000019
67500.0	50.3	-66.6			84.8	559.8	281.8	39.6	1.000019
68000.0	49.0	-65.7			82.3	561.2	280.8	39.7	1.000018
68500.0	47.8	-64.3			79.8	562.9	280.0	39.8	1.000018
69000.0	46.7	-63.0			77.4	564.7	279.6	39.3	1.000017
69500.0	45.5	-63.0			75.5	564.8	279.2	38.9	1.000017
70000.0	44.4	-63.8			73.9	563.7	278.9	38.3	1.000016
70500.0	43.3	-63.5			72.0	564.1	278.7	37.7	1.000016
71000.0	42.3	-61.7			69.7	566.5	278.4	37.1	1.000016
71500.0	41.3	-60.2			67.5	568.1	279.0	35.5	1.000015
72000.0	40.3	-60.5			66.0	568.1	280.6	33.8	1.000015
72500.0	39.3	-60.8			64.5	567.7	282.5	30.5	1.000014
73000.0	38.4	-61.1			63.0	567.4	284.6	28.2	1.000014
73500.0	37.4	-61.5			61.6	567.0	287.6	26.7	1.000014
74000.0	36.5	-61.6			60.2	566.9	290.9	25.2	1.000013
74500.0	35.6	-61.9			58.8	566.5	294.3	24.0	1.000013
75000.0	34.8	-62.1			57.4	565.9	292.1	26.4	1.000013
75500.0	33.9	-62.4			56.1	565.5	290.4	28.9	1.000012
76000.0	33.1	-62.7			54.8	565.2	288.9	31.4	1.000012
76500.0	32.3	-63.0			53.6	564.8	288.4	34.0	1.000012
77000.0	31.6	-62.6			52.2	565.3	284.0	36.7	1.000012
77500.0	30.8	-62.1			50.8	566.0	281.9	39.5	1.000011
78000.0	30.0	-61.5			49.5	566.7	280.1	41.5	1.000011
78500.0	29.3	-61.1			48.2	567.3	278.3	40.9	1.000011
79000.0	28.6	-60.7			46.9	567.8	276.4	40.4	1.000010
79500.0	27.9	-60.4			45.7	568.3	274.5	39.9	1.000010
80000.0	27.3	-60.0			44.6	568.8	272.4	38.7	1.000010
80500.0	26.6	-59.6			43.4	569.3	270.0	38.7	1.000010
81000.0	26.0	-59.2			42.3	569.9	267.3	34.2	1.000009
81500.0	25.4	-58.8			41.2	570.4	264.4	33.3	1.000009
82000.0	24.7	-59.0			40.3	570.1	261.4	32.0	1.000009
82500.0	24.2	-59.5			39.4	569.5	258.5	31.5	1.000009
83000.0	23.6	-59.9			38.5	569.0	255.5	31.0	1.000009
83500.0	23.0	-60.3			37.7	568.5	252.4	30.6	1.000008

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GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 6 (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
84000.0	22.5	-60.8			36.8	567.8	251.9	32.9	1.000008
84500.0	21.9	-61.2			36.0	567.2	251.7	35.4	1.000008
85000.0	21.4	-61.6			35.2	566.6	251.5	37.9	1.000008
85500.0	20.9	-62.1			34.5	566.0	251.7	40.5	1.000008
86000.0	20.4	-61.3			33.5	567.0	253.5	43.1	1.000007
86500.0	19.9	-59.4			32.4	569.6	255.1	45.7	1.000007
87000.0	19.4	-58.9			31.6	570.2	256.5	48.3	1.000007
87500.0	19.0	-58.4			30.8	570.9			1.000007
88000.0	18.5	-57.9			30.0	571.5			1.000007
88500.0	18.1	-57.4			29.2	572.2			1.000006
89000.0	17.7	-57.0			28.5	572.8			1.000006
89500.0	17.2	-56.5			27.7	573.5			1.000006
90000.0	16.8	-56.0			27.0	574.1			1.000006
90500.0	16.4	-55.5			26.3	574.7			1.000006
91000.0	16.0	-55.0			25.6	575.4			1.000006

STATION ALTITUDE 4051.00 FEET MSL
11 JAN. 80 1130 HRS MST
ASCENSION NO. 8

MANDATORY LEVELS
0110030008
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 7

PRESSURE	GEOPOTENTIAL	TEMPERATURE		REL.HUM.	WIND DATA	
		AIR	DEWPOINT	PERCENT	DIRECTION	SPEED
MILLIBARS	FEET	DEGREES CENTIGRADE			DEGREES(TN)	KNOTS
850.0	5010.	6.6	2.5	75.	202.6	5.8
800.0	6638.	3.7	1.6	86.	204.7	10.2
750.0	8348.	.1	-.6	95.	202.4	10.9
700.0	10154.	-2.9	-3.0	99.	277.1	6.9
650.0	12074.	-5.6	-5.7	99.	268.8	12.6
600.0	14129.	-7.1	-7.2	99.	259.2	27.4
550.0	16345.	-10.4	-10.7	98.	259.0	31.8
500.0	18737.	-14.6	-15.5	93.	258.4	41.1
450.0	21335.	-19.0	-21.8	78.	265.9	35.1
400.0	24180.	-25.1	-27.8	76.	259.0	46.1
350.0	27317.	-32.3	-35.6	66.	258.4	55.0
300.0	30822.	-41.2	-45.0	66.	243.4	65.6
250.0	34786.	-52.5			243.8	74.7
200.0	39398.	-63.6			256.0	67.2
175.0	42081.	-63.4			259.2	91.7
150.0	45261.	-56.8			265.5	68.9
125.0	49038.	-61.0			263.8	74.1
100.0	53511.	-67.7			281.1	71.1
80.0	57953.	-65.0			292.3	45.8
70.0	60620.	-65.6			286.1	38.3
60.0	63719.	-63.1			279.9	32.4
50.0	67359.	-66.7			281.6	39.6
40.0	71864.	-60.6			281.0	32.4
30.0	77704.	-61.5			280.2	41.5
25.0	81436.	-58.8			262.8	32.4
20.0	85906.	-59.5			254.6	44.9

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.